# TRANSMITTAL LETTER TO THE UNITED STATES RECEIVING OFFICE

Date 17 August 2004
International Appl In No. AWAITED
Attorney Docket No. 2003B092

-1382	(Rev O	1-2003) (Modifi	M) PCTI	JS2.FRP /REV03	Attomey D	Oocket No.	2003B092
1302			37 CFR 1.10 (if applied				
		FV	366446383 US	7		17 .	August 2004
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"Ex	xnress	Mail Post Off	ice to Addressee" serv Patents, P.O. Box 145	ice under 37 CFR 1.	.10 on the da	te indicated abo	ove and is addressed to Mail Sto
		FVJL	6446383	12		Ge	eorgia M. Carroll
					Туре	ed or printed name	of person mailing correspondence
· 🔯	New	International	Application	· · · · · · · · · · · · · · · · · · ·			
=							Earliest priority date
TI	ITLE	Improved Cat	alyst Recovery System				(Day/Month/Year)
1						ì	03 September 2003
L							
	appli	cation for purp purposes, the	following information i	ether a license for for s supplied. (Note: ch	eign transmit neck as many	ital should and c	ould be granted and for
Α.			on disclosed was not m		•		•
В.	Ш		prior U.S. application r				
C.		internation	ing prior U.S. application all application. (NOTE: nd this listing does not	priority to these app	lications may	is related to the or may not be o	invention disclosed in the attached claimed on form PCT/RO/101
Г	appli	cation no.	60/499,764		filed on	03 Septembe	r 2003
	appli	cation no.			filed on		
÷		and Domainer wh	DES NOT ALTER 🔀	MIGHT BE CONS  S.S. application to have	SIDERED T ve been made	O ALTER the g	throughout the specific general nature of the invention in a spection by the appropriate defens
ı. [	7 4 5	espanse to an	Invitation from the R	D/US. The following	document(s	) is (are) enclose	d:
۰. ۲	_ 	•	est for An Extension of			, ( )	
A.		-	•				
В.	ᆞ닏	A Power	of Attorney (General o	r Regular)	* .		
C.	· []	Replace	ment pages:				
•		pages		of the request (PCT/F	RO/101)	pages	of the figures
		pages		of the description		pages	of the abstract
		pages		of the claims			
D	. 🗆	Submission	on of Priority Document	s			÷
		Priority docur	nent		Prior	ity document	
	_			C. 1. 1 1 6	PCT/DO//	01 0000	
E	· [_]	Fees as sp	ecified on attached Fee	Calculation sheet for	m PC 1/RO/1	UI ailliex	
īv.[	] A	Request for R	ectification under PCT	'91	Petition		A Sequence Listing Diskette
v. [	] 0	her (please sp	ecify):	- 3			
	Γ	Applica:	nt			Louis N. Mor	eno
e per			/Agent (Reg. No.)			Typed name of	signer
rm is		<u> </u>	44,953	Louis .	n. mor	enc	· · · · · · · · · · · · · · · · · · ·
	- 15	Commo	n Representative			Signature	

## **REQUEST**

The undersigned requests that the present

For receiving Office use only	
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International Application No.	
International Filing Date	
'	
Name of receiving Office and "PCT International Applicat	ion"
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international application be processed according to the Patent Cooperation Treaty.	Name of receiving Office and "PCT International Application"					
according to the Fatent Cooperation Treaty.						
Box No. 1 TITLE OF INVENTION Improved Catalyst Recovery System	-					
Box No. II APPLICANT This person	on is also inventor					
Name and address: (Family name followed by given name; for a legal enti The address must include postal code and name of country. The country of Box is the applicant's State (that is, country) of residence if no State of residen	the address indicated in this	Telephone No. 281-834-5675				
ExxonMobil Chemical Patents Inc. A Corporation of the State of Delaware		Facsimile No. 281-834-2495				
5200 Bayway Drive Baytown, Texas 77520-5200 United States of America	- 3 - 1	Teleprinter No. N/A				
	:	Applicant's registration No. with the Office				
State (that is, country) of nationality: US	State (that is, countr	y) of residence:				
	ed States except States of America	the United States of America only the States indicated in the Supplemental Box				
Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)						
Name and address: (Family name followed by given name; for a legal ent The address must include postal code and name of country. The country of Box is the applicant's State (that is, country) of residence if no State of reside YANG, Norman 2 Normandy Drive Westfield, New Jersey 07090 United States of America	the address indicated in this ence is indicated below.)	applicant only  applicant and inventor  inventor only (If this check-box is marked, do not fill in below.)  Applicant's registration No. with the Office				
State (that is, country) of nationality: US	State (that is, count					
	States of America	the United States of America only the States indicated in the Supplemental Box				
Further applicants and/or (further) inventors are indica	ted on a continuation sl	heet.				
Box No. IV AGENT OR COMMON REPRESENTA	TIVE; OR ADDRESS	FOR CORRESPONDENCE				
The person identified below is hereby/has been appointed to the applicant(s) before the competent International Authoriti	act on behalf of es as:	agent common representative				
Name and address: (Family name followed by given name; for a legal enti- The address must include postal code and name of co	ty, full official designation. nuntry.)	Telephone No. 281-834-5675				
MORENO, Louis N. ExxonMobil Chemical Company Law Technology		Facsimile No. 281-834-2495				
P. O. Box 2149 Baytown, Texas 77522-2149 United States of America		Teleprinter No. N/A				
		Agent's registration No. with the Office 44,953				
Address for correspondence: Mark this check-box we the space above is used instead to indicate a special act	where no agent or committees to which corresp	non representative is/has been appointed and				

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Sheet	INO.		_		

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)						
If none of the following sub-boxes is used, this sheet should not be included in the request.						
Name and address: (Family name followed by given name; for a legal entity, full official The address must include postal code and name of country. The country of the address is Box is the applicant's State (that is, country) of residence if no State of residence is indicated TIRMIZI, Shakeel 76 Idolstone Lane Matawan, New Jersey 07747 United States of America	ndicated in this					
State (that is, country) of nationality: US  State (that is, country) US	hat is, country) of residence:					
This person is all designated all designated States exapplicant States United States of American						
Name and address: (Family name followed by given name; for a legal entity, full office. The address must include postal code and name of country. The country of the address Box is the applicant's State (that is, country) of residence if no State of residence is indicated that the applicant of the address indicated that is, country) of the address in the applicant of the address is indicated to the address and the address indicated that the address is a state of the address indicated that the address is a state of the address indicated that the address is a state of the address indicated that the address is a state of the address indicated that the address is a state of the address indicated the address indicated that the address is a state of the address indicated that the address is a state of the address indicated that the address is a state of the address indicated that the address is a state of the address indicated that the address is a state of the address indicated that the address is a state of the address indicated that the address is a state of the address indicated that the address is a state of the address indicated the address indicate	indicated in this					
State (that is, country) of nationality:  State (that is, country)	hat is, country) of residence:					
This person is all designated all designated States e applicant for the States United States of Amer	xcept the the United States the States indicated in the Supplemental					
Name and address: (Family name followed by given name: for a legal entity, full office The address must include postal code and name of country. The country of the address Box is the applicant's State (that is, country) of residence if no State of residence is indicated.	indicated in this					
State (that is, country) of nationality:  State (	(that is, country) of residence:					
This person is all designated all designated States applicant for the States United States of American	except the  the United States the States indicated in the Supplemental					
Name and address: (Family name followed by given name; for a legal entity, full off The address must include postal code and name of country. The country of the address Box is the applicant's State (that is, country) of residence if no State of residence is indicated.	s indicated in this					
State (that is, country) of nationality:  State	(that is, country) of residence:					
This person is all designated all designated States applicant for the States United States of Am						
Further applicants and/or (further) inventors are indicated on another continuation sheet.						

## Supplemental Box If the Supplemental Box is not used, this sheet should not be included in the request.

- If, in any of the Boxes, except Boxes Nos VIII(i) to (v) for which a special continuation box is provided, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No...." (indicate the number of the Box) and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:
- (i) if more than two persons are to be indicated as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;
- (ii) if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Boxes No. III and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;
- (iii) if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Box No. III" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;
- (iv) if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;
- if, in Box No. VI, there are more than three earlier (v) applications whose priority is claimed: in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box VI
- If the applicant intends to make an indication of the wish that

  the international application be treated, in certain designated States, as an application for a patent of addition, certificate of addition, inventor's certificate of addition or utility certificate of addition: in such a case, write the name or two-letter code of each designated State concerned and the indication "patent of addition," "certificate of addition," "inventor's certificate of addition," the number of the parent application or parent patent or other patent grant and the date of grant of the parent patent or other patent grant or the date of filing of parent application (Rules 4.11(a)(iii) and 49bis.1(a) or (b)).
- If the applicant intends to make an indication of the wish that the international application be treated, in the United States of America, as a continuation or continuation-in-part of an earlier application: in such a case, write "United States of America" or "US" and the indication "continuation" or "continuation-in-part" and the number and the filing date of the parent application (Rules 4.11(a)(iv) and 49.bis.1(d)).

### Continuation of Box IV:

ARECHEDERRA, Leandro; BELL, Catherine L.;
BELL, Keith A.; FICK, C. Milton; GRIFFIS, Andrew B.;
JAMES, Rick F.; KELLER, Bradley A.; KUBENA, Linda
A.; LAVOIE, Paul T.; LOMAS, Lucinda; MILBANK, Mandi
B.; MORENO, Louis N.; PRUITT, Tom F.; REID, Frank
E.; SANTINI, Dennis P.; SCHMIDT, C. Paige; SHER,
Jaimes; SHERER, Edward F.; TYUS, Darryl M.; WALSH,
Mana C.; WOO, Philip G.

All Having Offices at: 5200 Bayway Drive Baytown, Texas 77520 United States of America

Mailing Address: ExxonMobil Chemical Company P. O. Box 2149 Baytown, Texas 77522-2149 United States of America

CROMWELL, Michael A.; DEW, Melvyn J.; MARESCHAL, Anne; VELDHUIZEN, Albert Dirk Willem

Mailing Address: ExxonMobil Chemical Europe Inc. P. O. Box 105, B-1830 Machelen, BELGIUM

Sheet	NΙα		4	

Box No.V DESIGNATIONS					
The filing of this request co- international filing date, for and national patents.	onstitutes under Rule 4.9(a the grant of every kind of p	a), the designation of a rotection available and,	Il Contracting States be where applicable, for the	ound by the PCT on the le grant of both regional	
However,					
	signated for any kind of nati	·			
_	s not designated for any kir	•			
(The check-boxes above mo	is not designated for any ki ny be used to exclude (irrevo nw, of an earlier national ap	ocably) the designations	concerned in order to iority is claimed. See the	avoid the ceasing of the ne Notes to Box No. V as	
to the consequences of such	national law provisions in	these and certain other	States.)		
Box No. VI PRIORITY C					
The priority of the following	g earlier application(s) is he	ereby claimed:			
Filing date	Number	W	here earlier application	is:	
of earler application (day/month/year)	of earlier application	national application: country or Member	regional application:* regional Office	international application: receiving Office	
item (1) 03 September 2003 (03.09.2003)	60/499,764	US	·		
item (2)					
item (3)	:				
		1	<u> </u>	<u></u>	
	s are indicated in the Supple				
The receiving Office is application(s) (only if the is the receiving Office) ide	requested to prepare and earlier application was filed entified above as:	transmit to the Internal with the Office which f	ational Bureau a certification of the purposes of this	ned copy of the earlier international application	
	tem (1) item (2	, <del>-</del>	-/	see Supplemental Box	
* Where the earlier applica Industrial Property or one N	tion is an ARIPO application, i Nember of the World Trade Org	indicate at least one count anization for which that ea	ry party to the Paris Conv arlier application was filed	vention for the Protection of i (Rule 4.10(b)(ii)):	
	NATIONAL SEARCHING			:	
Choice of International carry out the international	Searching Authority (ISA al search, indicate the Author	) (if two or more Interi rity chosen; the two-lette	national Searching Auti er code may be used):	horities are competent to	
ISA/EP	· · · · · · · · · · · · · · · · · · ·				
from the International Se				Ì	
Date (day/month/year) 18 March 2003		mber Co i110454US E	ountry <i>(or regional Offic</i> P	:e)	
Box No. VIII DECLA	RATIONS				
The following declarati	ons are contained in Boxes indicate in the right column t	Nos. VIII (i) to (v) (mai he number of each type	rk the applicable of declaration):	Number of declarations	
Box No. VIII (i)	Declaration as to the id			:	
Box No. VIII (ii)	Declaration as to the ar	oplicant's entitlement, as and be granted a patent	at the international	: 1	
Box No. VIII (iii)					
Box No. VIII (iv)	Declaration of inventor of the United States of	rship (only for the purpo America)	ses of the designation	:	
Box No. VIII (v) Declaration as to non-prejudicial disclosures or exceptions to lack of novelty:					

		She	et No	····		,	
Box No. VIII (ii)	DECLARATION	ENTITLEM	ENT TO APPL	Y FOR AND I	BE GRANTED A P	ATENT	
The declaration must congeneral) and the specific							
Declaration as to the a 4.17(ii) and 51bis.1(a)	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis 1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate:						
In relation to this Int	In relation to this International Application,						
EXXONMOBIL CHE	MICAL PATENTS	INC., entitled	to apply for ar	nd be granted	a patent by virtue	of the following:	
an assignment from	YANG, Norman t	o EXXONMOI	BIL CHEMICA	L PATENTS IN	IC., dated 02 Dec	ember 2003,	
an assignment from	n TIRMIZI, Shakeel	to EXXONM	OBIL CHEMIC	CAL PATENTS	INC., dated 02 D	ecember 2003.	
This declaration is America.	made for the pur	poses of all	designations,	except the de	esignation of the	United States of	
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☐ This declaration is continued on the following sheet, "Continuation of Box No. VIII (ii)".

Sheet No. 6

Rox No. VIII (iii)	DECLARATION	N: ENTITLE	MENT TO C	LAIM PRIORITY

The declaration must conform to the standardized wording provided for in Section 213; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iii). If this Box is not used, this sheet should not be included in the request.

Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)): In relation to this International Application,

EXXONMOBIL CHEMICAL PATENTS INC., is entitled to claim priority of earlier application

60/499,764

an assignment from YANG, Norman to EXXONMOBIL CHEMICAL PATENTS INC., dated 02 December 2003,

an assignment from TIRMIZI, Shakeel to EXXONMOBIL CHEMICAL PATENTS INC., dated 02 December 2003.

This declaration is made for the purposes of all designations, except the designation of the United States of America.

This declaration is continued on the following sheet, "Continuation of Box No. VIII (iii)".

		-
Sheet	NIA	- /

Box No. IX CHECK LIST; LANGUAGE	OF FILING	1				
This international application contains:  a) in paper form, the following number of sheets:	This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):	Number of items				
request (including declaration sheets) : 7  description (excluding sequence listing and/or tables related thereto) : 12  claims : 3  abstract : 1  drawings : 3  Sub-total number of sheets 26  sequence listing : tables related thereto :  (for both, actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (c)  Total number of sheets : 26  (b) only in computer readable form (Section 801(a)(i))  (i) sequence listing  (ii) tables related thereto  (c) also in computer readable form (Section 801(a)(ii))  (i) sequence listing  (ii) tables related thereto  Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the	1.	al efi he on				
sequence listing:  tables related thereto: (additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)		: ; 2				
Figure of the drawings which	Language of filing of the international application English	<del></del>				
Roy No. Y SIGNATURE OF APPLICANT	AGENT OR COMMON REPRESENTATIVE	the request).				
Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).  Low M. Moreno, Louis N. Registration Number: 44,953						
Date of actual receipt of the purported international application:	For receiving Office use only  2. Dra	wings:				
<ol> <li>Corrected date of actual receipt due to la timely received papers or drawings compurported international application:</li> </ol>	3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:					
4. Date of timely receipt of the required corrections under PCT Article 11(2):	i i i i i i i i_	ot received:				
5. International Searching Authority (if two or more are competent): ISA/	6. Transmittal of search copy delayed until search fee is paid					
Data of receipt of the receipt comy	For International Bureau use only					
Date of receipt of the record copy by the International Bureau:						

This sheet is not part of and does not count as a sheet of the international application.

PC	$\mathbf{T}$	For receiving Office use only			
FFF CALCUL	ATION SHEET				
Annex to the		International Application No.			
Applicant's or agent's file reference	2003B092	Date stamp of the receiving Office			
Applicant			İ		
ExxonMobil Chemical Patents In	ic.		4		
CALCULATION OF PRESCRI	BED FEES	240.00 T			
1. TRANSMITTAL FEE		240.00[1]			
International search to be carr	l Searching Authorities are comp icate the name of the Authority w	etent to carry out			
3. INTERNATIONAL FILING	FEE				
Where item (b) and/or (c) of I Where item (b) and (c) of Bo	Box No. IX apply, enter Sub-total x No. IX do not apply, enter Total	number of sheets \ 26			
il first 30 sheets	L	476.00 i1			
number of sheets in excess of 30	x 12.00 =	0.00 i2			
I thereto are filed in com	only if sequence listing and/or tab puter readable form under Section on paper, under Section 801(a)(ii)	1 801(2)(1),			
	400 x =	i3			
Add amounts entered at il, i		476.00 [1]			
(Applicants from certain S international filing fee. Who	States are entitled to a reduction ere the applicant is (or all applican	on of 75% of the nis are) so entitled,			
4. FEE FOR PRIORITY DOC	UMENT (if applicable)	20.00 F	_ _		
5. TOTAL FEES PAYABLE Add amounts entered at T, S	S, I and P, and enter total in the TO	TOTAL			
MODE OF PAYMENT					
authorization to charge deposit account (see below	postal money order	acash coupor			
cheque	☐ bank draft		specify):		
AUTHORIZATION TO CH (This mode of payment may no	ARGE (OR CREDIT) DEPOSIT ot be available at all receiving Office	ces) Receiving office	US		
	ne total fees indicated above.	Deposit Account No.:	05-1712 August 2004		
accounts of the receiving	narked only if the conditions for de Office so permit) Authorization to verpayment in the total fees indicat	charge any ted above. Name: Lou	uis N. Moreno		
	he fee for priority document.	Signature: Jour M.	morro		



(PCT Rule 90.5)

The undersigned person(s): (Family name followed by given name; for a legal entity, full official des	ignation. The address n	nuss include postal code and name of country.)
EXXONMOBIL C 5200 Baytov		ATENTS INC. e 20
hereby appoint(s) the following persons as:	agent 🔀	common representative
Name and address (Family name followed by given name; for a legal entity, full official d	esignation. The address	must include postal code and name of country.)
ARECHEDERRA, Leandro; BELL, Catherin Rick F.; KELLER, Bradley A.; KUBENA, MORENO, Louis N.; NOWAK, Kelly A.; P SCHMIDT, C. Paige; SHER, Jaimes; TYUS,	Linda A.; LC RUITT, Tom F	MAS, Lucinda; MILBANK, Mandi B.; REID, Frank E.; SANTINI, Dennis P.;
having offices at: 5200 Bayway Drive Baytown, Texas 77520 United States of America	Mailing Ad	dress: P.O. Box 2149 Baytown, Texas 77522-2149 United States of America
DEW, Melvyn J.; MARESCHAL, Anne; VE Michael A.	LDHUIZEN, A	lbert Dirk Willem; CROMWELL,
	Mailing A	ldress: P.O. Box 105 B-1830 Machelen Belgium
to represent the undersigned before	all the co	mpetent International Authorities
	the International Searching Authority only	
	the Interr	national Preliminary Examining Authority only
in connection with any and all international application	ons filed by the und	ersigned with the following Office
United States of America	as receiving Office	and to make or receive payments on behalf of the
undersignec'.		
Signature(s) (where there are several persons, each of them the capacity in which the person signs, if such capacity is no	n must sign; next to ed ot obvious f <del>rom readi</del>	ach signature, indicate the name of the person signing and ng this power):
		3
Andrew B. ( EXXONMOBIL	Triffie Assista	ant Secretary PATENTS INC.
Date: July 30, 2004		